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PATENT DEPARTMENT TW 199 THE BLACK & DECKER CORPORATION 701 EAST JOPPA ROAD TOWSON, MD 21286		ATION	BRAHAN, THOMAS J	
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No. **09/187,358**

Applicant(s)

MAUER et al

Examiner

Thomas J. Brahan

Art Unit 3652



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filled after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) X Responsive to communication(s) filed on *Mar 14, 2002* 2a) X This action is FINAL. 2b) \square This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213. Disposition of Claims 4) Claim(s) 1, 2, and 7-15 is/are pending in the application. 4a) Of the above, claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) 💢 Claim(s) <u>1, 2, and 7-15</u> is/are rejected. 7) Claim(s) _____ is/are objected to. 8) 🗌 Claims _____ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on ______ is/are a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on ______ is: a) approved b) disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☑ All b) ☐ Some* c) ☐ None of: 1. X Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e). a) The translation of the foreign language provisional application has been received. 15) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 1) X Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). 5) Notice of Informal Patent Application (PTO-152) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 6) Other: 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s).

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
- 2. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103.

3. Claims 1, 2, 7-9, 12, 13, and 15 are rejected under 35 U.S.C. § 102(b) as being anticipated by Moorman. Moorman shows a conveyor for elongate components designed with a head and a shank, with a feed arrangement for feeding the components in a prescribed direction, comprising a transfer arrangement with a transfer region (the location occupied by the nail when it is hit by the driver 8) into which the elongate components are fed from a feed duct (see figure 8) having a feed path (29) for the heads, and a shank guiding duct with the ducts being in communication with a conveying duct (the duct above the feed

region) into which the components can be moved from the transfer region, characterized by the transfer arrangement which comprises:

at least one catch element (59) located externally of the transfer region (as it is above the transfer region) and extending along and adjacent the head guiding duct generally in the prescribed direction of the feeding of the elongate components;

at least one portion of the at least one catch element (59) being movably extendable into and out of the feed path of the head guiding duct;

a biasing element (61) positioned to normally urge the at least one portion of the catch element movably into the feed path of the head guiding duct for engagement with the elongate components being fed therethrough; and

the at least one catch element and the at least one portion thereof being mounted for deflected movement out of the feed path of the head guiding duct against normal urging of the biasing element upon engagement with each of the elongate components being fed through the feed path of the head guiding duct to allow continued feeding of the elongate components through the feed duct.

The lower surface of the pawl (59) is a face which partially faces the transfer region and prevents backflow of the group of nails as to prevent the rail in the transfer region from slipping back, as recited in claim 2. The catch element (59) pivots about an axis (60), as recited in claim 7. The leaf spring (61) acts as a compression spring, as recited in claim 8. The transfer arrangement includes two relatively displaceable positioning segments (safety trip 6 and guide body 5) defining the recess through which the nail is introduced into the conveying duct, as recited in claim 9. The positioning segments (5 and 6) together have a form substantially corresponding to the cross section of the feed duct, as broadly recited in claim 12, and form a continuation of the feed duct, as recited in claim 13. The catch element (59) has a second portion, remote from the first tip portion, which engages a stop surface (52) with the biasing element (61) urging the second portion into the stop surface, as recited in claim 15.

4. Claims 1, 2, 7, and 8 are rejected under 35 U.S.C. § 102(e) as being anticipated by Olvera et al. Olvera et al shows a conveyor for elongate components designed with a head and a shank, with a feed arrangement for feeding the components in a prescribed direction, comprising a transfer arrangement with a transfer region (under plunger 140) into which the elongate components are fed from a feed duct (74) having a feed path (70) for the heads, and a shank guiding duct with the ducts being in communication with

a conveying duct (130) into which the components can be moved from the transfer region, characterized by the transfer arrangement which comprises:

at least one catch element (90) located externally of the transfer region and extending along and adjacent the head guiding duct generally in the prescribed direction of the feeding of the elongate components;

at least one portion (65) of the at least one catch element being movably extendable into and out of the feed path of the head guiding duct;

a biasing element (68) positioned to normally urge the at least one portion of the catch element movably into the feed path of the head guiding duct for engagement with the elongate components being fed therethrough; and

the at least one catch element and the at least one portion thereof being mounted for deflected movement out of the feed path of the head guiding duct against normal urging of the biasing element upon engagement with each of the elongate components being fed through the feed path of the head guiding duct to allow continued feeding of the elongate components through the feed duct.

The lower surface of the pin (65) is a face which partially faces the transfer region and prevents backflow of the group of nails as to prevent the rail in the transfer region from slipping back, as recited in claim 2. The catch element (90) pivots, as recited in claim 7. The spring (68) acts as a compression spring, as recited in claim 8.

Claims 1, 2, 7-14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Blacket et al '114. Figure 8 of Blacket et al '114 shows a conveyor for elongate components designed with a head and a shank, with a feed arrangement for feeding the components in a prescribed direction, comprising a transfer arrangement with a transfer region (occupied by rivet 217) into which the elongate components are fed from a feed duct (220) having a feed path for the heads, and a shank guiding duct and a biased catch element (leaf spring 229). This catch varies from the claims by not having a second element to bias it in place. However a leaf spring and a lever pivoted by a compression spring are art recognized equivalents. Therefore it would have been obvious to one of ordinary skill in the art to modify the conveyor of Blacket et al '114 by substituting a pivoted spring biased lever for the leaf spring catch, as it is an art recognized equivalent which would work easily as well. The pins (260) of Blacket et al '114 are displaceable positioning segments in a conveying duct, as recited in claims 9 and 10. The positioning segments (1460) of figure 24 have pivots

axes, as recited in claim 11. They have a form functionally corresponding to the feed duct, and form a continuation thereof, as recited in claims 12 and 13. Figures 30-36 show split sleeves with a conical shape, as recited in claim 14.

- 6. Claims 1, 2, 7 and 8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Schafer et al. Schafer et al shows a conveyor for elongate components designed with a head and a shank, with a biased catch element (leaf spring 8). This catch varies from the claims by not having a second element to bias it in place. However a leaf spring and a lever pivoted by a compression spring are art recognized equivalents. Therefore it would have been obvious to one of ordinary skill in the art to modify the conveyor of Schafer et al by substituting a pivoted spring biased lever for the leaf spring catch, as it is an art recognized equivalent which would work easily as well.
- 7. Claim 14 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Olvera et al in view of Stich. Olvera et al shows the basic claimed combination, as detailed above. It has a split sleeve (54, 54) but varies from claim 14 by having its resilient elements (56) at the upper end of the sleeve instead of at the remote end. Stich shows a similar split sleeve conveying duct which has helical springs contacting the lower ends of the sleeve. The helical springs have large spring forces, see column 4, lines 15 and 16. It would have been obvious to one of ordinary skill in the art to modify the sleeves (54, 54) of Olvera by substituting helical springs for the springs (56), as to have larger spring forces, as taught by Stich.
- 8. Claim 14 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Schafer et al in view of Stich. Schafer et al shows the basic claimed nail conveyor, as detailed above. It varies from the clams by not showing the entire nail driver as to have a split sleeve for the conveying duct. Stich shows a similar nail gun with an attachment (6) for resiliently holding the nails adjacent the transfer region. It would have been obvious to one of ordinary skill in the art to provide the nail driver of Schafer et al with a split sleeve attachment, to hold the nails while advancing them through the transfer region, as taught by Stich.
- 9. Applicant argues in the amendment filed March 14, 2002 that Blacket et al is not an anticipation as the claims have been amended to recite that the catch element is located externally of the transfer region. However the term "transfer region" lacks a specific meaning it the art. It is not defined in the claims as to

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be a specific region. The term "region" itself is broad as it merely refers to a space somewhere in some area of the device. The space does not have specific boundaries. Therefore the region considered as the transfer region of Blacket et al can be the exact location occupied by the rivet in Figure 8, as to have the catch (229) located externally of this region.

- 10. Applicant argues that Moorman is not an anticipation as pawl (59) is above the path of the nail heads not in the path. However as the pawl contacts the nail heads, see the top of column 8, it is in their path.
- 11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. An inquiry concerning this action should be directed to Examiner Thomas J. Brahan at telephone number (703) 308-2568 on Mondays through Thursdays from 8:30-6:00 EST. The examiner's supervisor, Ms. Eileen Lillis, can be reached at (703) 308-3248. The fax number for Technology Center 3600 is (703) 305-7687.

THOMAS J. BRAHAN PRIMARY EXAMINER